## **REMARKS**

The Final Office Action of June 6, 2005, and the Advisory Actions of July 27, 2005, and August 17, 2005, have been considered by the Applicants. Applicants acknowledge the allowance of claim 25. Claims 1, 10, 20, and 25 have been amended. Claims 1, 2, 4-8, and 10-25 remain pending. Reconsideration of the Application is requested.

## A. <u>Section 112 Issues</u>

Claim 10 was rejected under 35 U.S.C. 112, ¶, as being indefinite because it depended from cancelled claim 9. Applicants traverse the rejection.

Claim 10 has been amended to depend from claim 14. Applicants note that in the prior Office Action dated 12/8/2004, the Examiner stated that claims 9 and 14 were of the same scope. Applicants request withdrawal of the rejection.

In light of the Examiner's statement that claim 25 may be confusing insofar as the word "optionally" was used, claim 25 has been amended to remove the word "optionally." This ensures that claim 25 is definite.

## B. The claims are not obvious.

In the Advisory Action of July 27, 2005, the Examiner continued the 103(a) rejections based on Ong and Arai.

Claims 1, 2, 4-6, 10-14, and 16-23 were rejected under 35 U.S.C. 103(a) as obvious over Ong. Applicants note that Ong, originally cited as 2003/0144466, has issued as US Patent 6,777,529. Applicants traverse the rejection.

In the Advisory Action of July 27, 2005, the Examiner did not accept Applicants' argument because Applicants had not amended claim 1 to use the transitional phrase "consisting of" as argued. Applicants have amended claim 1 to use the transitional phrase "consisting of." Ong requires the presence of the disubstituted thiophene and

does not teach or suggest a polythiophene without it. Therefore, claims 1, 2, 4-6, and 10-14 are non- obvious because Ong does not disclose all claim limitations. MPEP § 2143.03.

As previously noted, claims 16-23 have always explicitly excluded Ong's disubstituted thiophene from the repeating segment and in this sense has always been narrower than claim 1. In the Advisory Action, the Examiner stated:

As far as remarks regarding claim 16, as noted in the previous office action, disubstituted thiophenes, although excluded, are considered to be obvious modification as per previous office actions. No materially new arguments have been presented at this time, thus rejection stands as per reasons of record.

thiophenes are considered an obvious modification. The only reasons of record for rejecting claims 16-23, given in the Office Action mailed December 8, 2004, stated that the <u>dialkyl-substituted arylene</u> was considered an obvious modification. Claim 16 has only been amended to require the sum of x and y to be at least 1; it has never been amended to exclude disubstituted thiophenes because they are already excluded. Applicants have consistently presented this argument in each of the Amendments as well. Ong explicitly teaches a disubstituted thiophene and never teaches the polythiophenes claimed in claims 16-23. For this reason, Ong does not render claims 16-23 obvious.

In response to Note 3 of the Advisory Action of July 27, 2005, Applicants have removed the amendment to claim 22 and rely on the arguments presented as to the allowability of claim 16. Because the prior Amendment after Final was not entered, Applicants have labeled claim 22 with its prior status of Original.

Applicants request withdrawal of the rejection based on Ong.

Claims 1, 2, 4-8, 10-15, and 24 were rejected under 35 U.S.C. 103(a) as obvious over Arai. Applicants traverse the rejection.

Application No. 10/646,196

In the Advisory Action, the Examiner did not accept Applicants' argument because Applicants had not amended claim 1 to use the transitional phrase "consisting of" as argued. Applicants have amended claim 1 to use the transitional phrase "consisting of." Arai requires the presence of the vinylene group and does not teach or suggest a thiophene without it. Therefore, claims 1, 2, 4-8, 10-15, and 24 are not rendered obvious by Arai.

Applicants request withdrawal of the rejection based on Arai.

## CONCLUSION

For the above reasons, it is submitted that all pending claims (1, 2, 4-8, and 10-25) are in condition for allowance. Withdrawal of the rejections and issuance of a Notice of Allowance is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, she is hereby authorized to call Richard M. Klein, at telephone number 216-861-5582, Cleveland, OH.

It believed that no fee is due in conjunction with this response. If, however, it is determined that fees are due, authorization is hereby given for deduction of those fees, other than the issue fees, from Deposit Account No. 24-0037.

Respectfully submitted,

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